

Materials List for:

Analysis of AtHIRD11 Intrinsic Disorder and Binding Towards Metal Ions by Capillary Gel Electrophoresis and Affinity Capillary Electrophoresis

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Materials

Name	Company	Catalog Number	Comments
AtHIRD11 sample	Shizuoka University (Group Prof. M. Hara)	-	Dehydrin Protein from <i>Arabidopsis thaliana</i> expressed in <i>Escherichia coli</i>
Barefused silica capillary	Polymicro Technologies (Phoenix, USA)	106815-0017	TSP050375, 50 µm inner diameter, 363 µm outer diameter, polyimide coating
Agilent 1600A	Agilent Technologies (Waldbronn, Germany)	comercially not available anymore	Capillary electrophoresis instrument; Agilent 7100 CE can be used instead
Agilent 7100 CE	Agilent Technologies (Waldbronn, Germany)	G7100A	Capillary electrophoresis instrument
Injekt 2 mL	B. Braun (Melsungen, Germany)	4606051V	Syringe for filtration
Rotilabo-syringe filters	Carl Roth GmbH + Co. KG (Karlsruhe, Germany)	KY62.1	PVDF membrane filter for solution filtration
Eppendorf Research plus 10 µL	Eppendorf (Wesseling-Berzdorf, Germany)	3121 000.023	Micro pipette for sample handling
Eppendorf Research plus 10 µL	Eppendorf (Wesseling-Berzdorf, Germany)	3121 000.120	Micro pipette for handling the ligand solutions
Bulb pipette 10 mL	Duran Group GmbH(Mainz, Germany)	24 338 08	Preparing theNaOH solution
Bulb pipette 25 mL	Duran Group GmbH(Mainz, Germany)	24 338 14	Preparing the ligand solution
Duran glas volumetric flask 25 mL	Duran Group GmbH(Mainz, Germany)	24 671 1457	Preparing the ligand stock solution
Duran glas volumetric flask 10 mL	Duran Group GmbH(Mainz, Germany)	24 671 1054	Preparing the ligand stock solution
Proteome Lab SDS MW Gel Buffer	Beckman Coulter (Brea, USA)	comercially not available anymore	Separation during capillary gel electrophoresis / Alternative SDS buffer: CE-SDS run buffer from Bio-Rad Laboratories (München, Germany) Catalog Number: 1485032
Acetanilide	Sigma-Aldrich (Steinheim, Germany)	397229-5G	Electroosmotic flow marker
Manganese(II) chloride	Sigma-Aldrich (Steinheim, Germany)	13217	Ligand
Ethylenediaminetetraacetic acid (EDTA)	Sigma-Aldrich (Steinheim, Germany)	431788-100G	Rinsing ingredient
Bariumchloride	Sigma-Aldrich (Steinheim, Germany)	202738-5G	Ligand
Sodium dodecyl sulfate	Sigma-Aldrich (Steinheim, Germany)	71729-100G	Solublizing protein for capillary gel electrophoresis

Nickel(II) chloride hexahydrate	Sigma-Aldrich (Steinheim, Germany)	654507-5G	Ligand
Selenium(IV) chloride	Sigma-Aldrich (Steinheim, Germany)	323527-10G	Ligand
2-amino-2-hydroxy-methylpropane-1.3-diol (Tris)	Sigma-Aldrich (Steinheim, Germany)	252859-100G	Buffer ingredient
Zinc(II) chloride	Merck Millipore (Darmstadt, Germany)	1088160250	Ligand
Strontium nitrate	Merck Millipore (Darmstadt, Germany)	1078720250	Ligand
Calcium chloride dihydrate	Merck Millipore (Darmstadt, Germany)	1371015000	Ligand
37% hydrochloric acid	Merck Millipore (Darmstadt, Germany)	1003171000	Adjusting pH
Copper(II) chloride dihydrate	Riedel-de Haën (Seelze, Germany)	31286	Ligand
Sonorex Longlife RK 1028 CH 45L	Allpax (Papenburg, Germany)	10000084;0	Ultrasonic bath
Agilent ChemStation Rev. 8.04.03-SP1	Agilent Technologies (Waldbronn, Germany)	G2070-91126	Software packages to operate the CE instruments, acquise data and evaluate it